

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Pascal NICOLLE et al.

Serial No.: New Application

Filed: February 13, 2002

For: PROGRAMMING STATION GENERATING A COMPACTED PROGRAM  
AND AUTOMATION EQUIPMENT USING SUCH A PROGRAM

PRELIMINARY AMENDMENT

Commissioner for Patents  
Washington, D.C. 20231

Sir:

Prior to examination of the above-identified application,  
please enter the following specification changes as noted below:

IN THE CLAIMS:

Please amend claims 4, 8 and 12 as follows:

4. (Amended) Programming station according to claim 1,  
characterised in that the set of description files (401) contains  
an application program description file, an application input-  
output description file, and an application data description  
file.

8. (Amended) Programming station according to claim 1,  
characterised in that it includes an XML handler (20) in a non-  
volatile memory dialoguing through notifications firstly with a  
management module (30) of the tree structure representative of  
the automation application expressed in the XML language, and  
also with a plurality of database managers (Mng1, Mng2, etc.),  
each manager being specific to part of the automation application  
stored in one of the databases (Db1, Db2, etc.).

12. (Amended) Automation equipment according to claim 10,  
characterised in that it comprises means of decompressing a file  
in the compacted language (501) to a description file in XML  
language (401) by using a specific stylesheet (601) stored in  
memory (50).

REMARKS

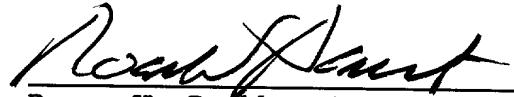
Claims 1-12 remain pending herein. Claims 4, 8 and 12 have been amended hereby.

This Preliminary Amendment is submitted to eliminate multiply dependent claims from the above-identified application.

Examination of this application on its merits is respectfully requested.

Respectfully submitted,

PARKHURST & WENDEL, L.L.P.



Roger W. Parkhurst  
Registration No. 25,177

February 13, 2002  
Date

RWP/mhs

Attachment: Claim Mark-ups

Attorney Docket No. SCHN:019

PARKHURST & WENDEL, L.L.P.  
1421 Prince Street, Suite 210  
Alexandria, Virginia 22314-2805  
Telephone: (703) 739-0220

CLAIMS

1. Programming station for an automation application designed to be executed in an automation equipment, the programming station comprising a memory containing a set of one or several description files  
5 (401), each description file describing part of the automation application and being expressed in a single, hierarchised and object oriented language, characterised in that the programming station uses a compression program (60) that generates a file in the  
10 compacted format (501) for each description file, the contents of the compacted file being sufficient for the description of part of the application considered, and in that it uses a loading program to store each compacted file (501) in a memory (50) in the automation  
15 equipment.

2. Programming station according to claim 1, characterised in that it uses a decompression program (61) to generate a description file (401) in a single, hierarchised and object oriented language describing  
20 part of the application, from a compacted file (501) stored in the automation equipment memory (50).

3. Programming station according to claim 2, characterised in that the single, hierarchised and object oriented language is the XML language.

25 | 4. Programming station according to ~~one of claims~~  
~~1 to 3~~ claim 1, characterised in that the set of description files (401) contains an application program description file, an application input-output description file, and an application data description  
30 file.

5. Programming station according claim 3, characterised in that the compression program (60) and the decompression program (61) comprise two steps.

6. Programming station according to claim 3,  
5 characterised in that the compression program (60)  
comprises a step to reduce the tags contained in a  
description file (401) expressed in the XML language by  
application of a specific stylesheet (601) and a step  
to execute a compaction algorithm (603) adapted to XML  
10 files.

15 7. Programming station according to claim 3,  
characterised in that the decompression program (61)  
comprises a step to execute a decompaction algorithm  
(603) adapted to XML files and a step to recreate  
source tags contained in a description file (401)  
expressed in the XML language, by application of a  
specific stylesheet (601).

20        8. Programming station according to one of the  
          previous claims claim 1, characterised in that it  
includes an XML handler (20) in a non-volatile memory  
dialoguing through notifications firstly with a  
management module (30) of the tree structure  
representative of the automation application expressed  
in the XML language, and also with a plurality of  
25 database managers (Mng1, Mng2, etc.), each manager  
being specific to part of the automation application  
stored in one of the databases (Db1, Db2, etc.).

9. Automation equipment comprising a memory (50) containing an automation application program in the form of a binary file (502) executable by the automation equipment, characterised in that the automation equipment stores the executable file (502) in its memory, together with one or several files (501)

in compacted format output from a set of one or more description file(s) (401) describing the automation application and expressed in a single, hierarchised and object oriented language.

5       10. Automation equipment according to claim 9, characterised in that the single, hierarchised and object oriented language is the XML language.

10      11. Automation equipment according to claim 10, characterised in that it comprises translation means in order to convert application description files (401) expressed in the XML language into a binary file (502) that can be executed by the automation equipment.

15      12. Automation equipment according to claim 10 or 11, characterised in that it comprises means of decompressing a file in the compacted language (501) to a description file in XML language (401) by using a specific stylesheet (601) stored in memory (50).